## WISHA REGIONAL DIRECTIVE

WISHA Services
Department of Labor and Industries

**29.50** 

# Warning Lines Used For Fall Protection in Construction Date: May 24, 2005

### I. Background

Falls from elevation are one of the leading causes of serious injury or death in the construction industry. For this reason, the Department of Labor and Industries (L&I) has adopted a number of standards intended to protect workers from such hazards. Recently, the department has received a number of questions related to the use of a warning line. Specifically, some employers have asked whether it is acceptable to use warning lines as a fall protection system on walking/working surfaces in lieu of standard guardrails or the equivalent. L&I has also received several questions regarding the use of highly visible caution or danger tape as the warning line.

#### II. Scope and Application

This WISHA Regional Directive (WRD), which remains in effect indefinitely, provides guidance to WISHA staff regarding the use of a warning line system for fall protection in construction. It replaces all previous guidance on the subject, whether formal or informal.

#### **III.** Interpretive Guidance

A. When is it acceptable to use warning lines for fall protection?

WAC 296-155, Part C-1 recognizes warning lines as a method of fall protection only during roof work on low-pitched roofs (WAC 296-155-24515(1)(b)) or during leading edge activities (WAC 296-155-24520(1).

If an employer engaged in low-pitched roof work or leading edge work elects to use the warning line system as a fall protection method, the employer must meet all of the criteria for a warning line as outlined in the standard. If there are deficiencies in the warning line system, the employer is in violation of WAC 296-155-24510 for not providing a fall protection system that meets the requirements of Part C-1.

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B. Is an employer in violation when using a warning line system to provide fall protection to employees working on an open-sided surface or around floor openings subject to WAC 296-155, Part K?

- Yes, WAC 296-155, Part K requires that open-sided surfaces that are 4 feet or more above an adjacent surface be guarded with standard railing or the equivalent. A warning line does not provide fall protection equivalent to that provided by a standard guardrail.
- C. Is there any time that the department would accept a warning line as equivalent protection for the guarding of open-sided surfaces or floor openings subject to WAC 296-155, Part K?

Yes, the department would consider the use of a warning line to provide fall protection to employees working on an open-sided surface or around floor openings *de minimis* and therefore not a violation *if* an employer meets *all* of the following criteria:

- 1. The warning line is erected at least 15 feet from the unprotected edge.
- 2. The warning line meets all other criteria listed in WAC 296-155-24515(3).
- 3. Employees have been trained in the use of the warning line, its limitations and the requirement for additional fall protection when working outside of the warning line.
- 4. When the fall hazard is 10 feet or more, the employer must comply with the fall protection work plan requirements in WAC 296-155-24505.

If the employer has not met ALL of the above criteria, the employer is in violation of WAC 296-155, Part K for not guarding open-sided surfaces with standard railing or equivalent.

D. Can an employer use highly visible caution or danger tape as the warning line in lieu of a flagged rope or chain?

Yes, 3-inch wide by 3 or 4 mils thick, highly visible caution or danger tape exceeds the 200 lb. tensile strength required for a warning line. If an employer uses highly visible caution or danger tape for the warning line, WISHA will accept it as equivalent to a flagged rope or chain warning line.

| Approved: |                                                                               |
|-----------|-------------------------------------------------------------------------------|
|           | Mel James, Acting Senior Program Manager<br>WISHA Policy & Technical Services |

For further information about this or other WISHA Regional Directives, you may contact WISHA Policy & Technical Services at P.O. Box 44648, Olympia, WA 98504-4648 -- or by telephone at (360) 902-5503. You also may review policy information on the WISHA Website (http://www.lni.wa.gov/Safety/).